USSTRATCOM Update

Chief, Space and Missile Defense C4 Division/J66

13 Dec 2011

This briefing is classified:
UNCLASSIFIED

Overview

- **USSTRATCOM Responsibilities**
  - **Component Commanders**
  - **Headquarters Staff**
- **Organizational Events Since Last Conference**
- **Roles and Responsibilities**
- **Milestones Since Last Conference**
- **International Agreements**
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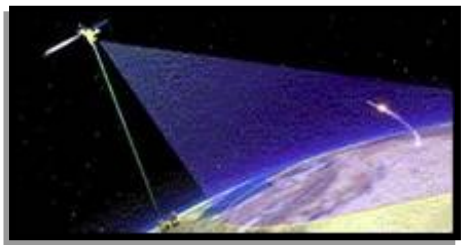
USSTRATCOM Responsibilities

Plan and Execute

- Strategic Deterrence & Nuclear Operations
- Space
- Cyberspace
- Global Strike
- Combating WMD

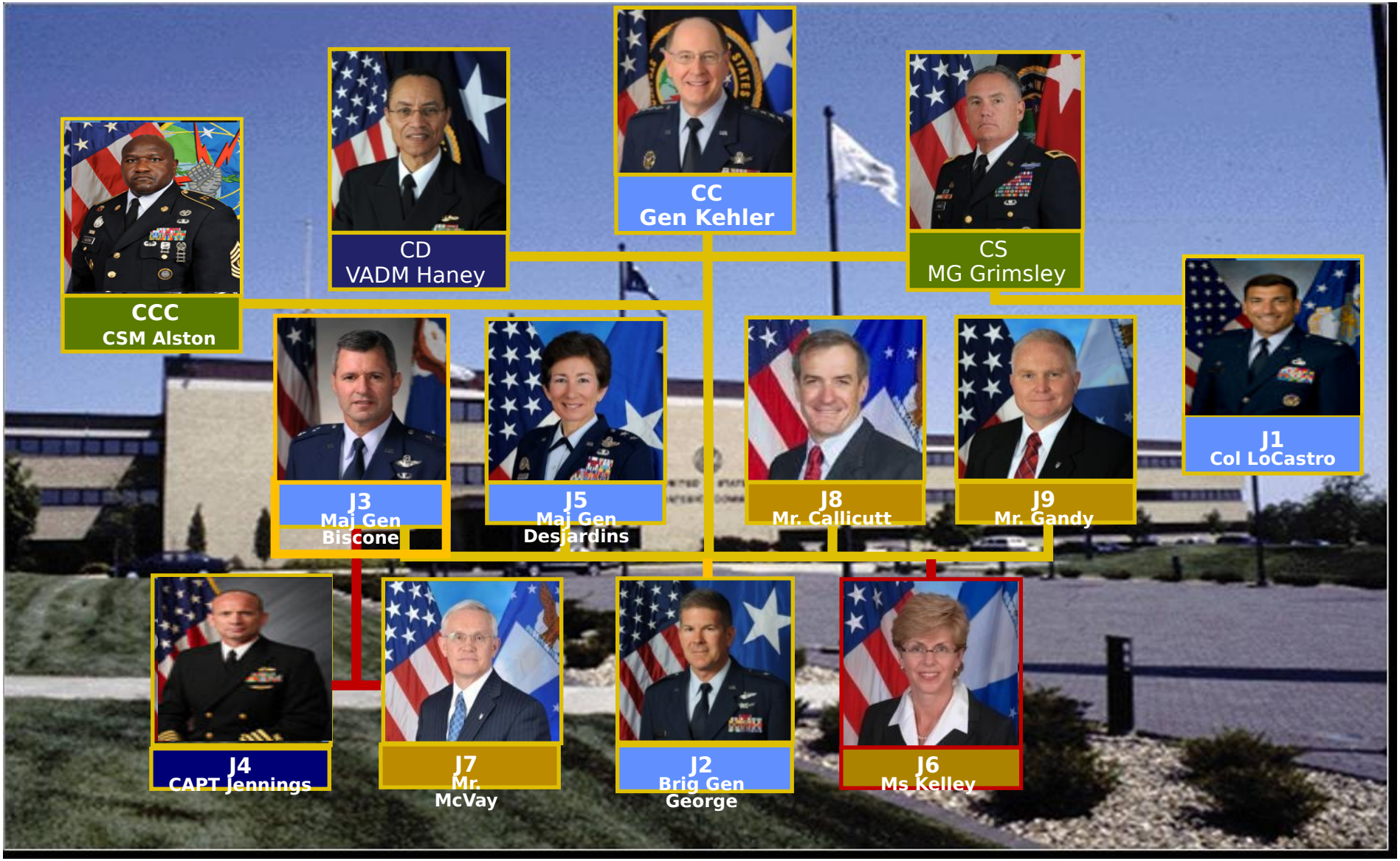
Plan, Integrate & Synchronize

- Missile Defense
- Intelligence, Surveillance, & Reconnaissance
- Information Operations



Component Commanders

USSTRATCOM
Headquarters Organization as of Aug 11



Organizational Events Since Last Conference

USJFCOM Disestablishment

- **References:**
  - Resource Management Decision 703A2, 25 Jan 11
  - SecDef Memo United States Joint Forces Command Disestablishment, 9 Feb 11
  - SecDef Memo, Reassignment and Realignment of USJFCOM Organizations and Functions, 27 Apr 11
- **Organizational Transfers:**
  - Joint SATCOM & Integration Branch (J66)
  - Joint Frequency Management Office (J66)
  - Joint COMSEC Management Office (J67)
- **Effective Date:** 1 July 2011
- **Status:** IOC Complete; FOC 1 Oct 2011

Branch Responsibilities

J662

- **Policy/Guidance:**
  - CJCSI 6250
  - EMI Inter Agency Coordination
  - SI 714-5
  - EMI Reporting (JSIR/BLACKCAT/WILDCAT)
  - Space/ EMI OPORDs
  - Geolocation CA/IA (MOUs)
- **Forums:**
  - MCEB Space Panel
  - RAIDRS ICT
  - PIRT/SERT/JEMSCC
  - JSIR Conference
- **Programs:**
  - RAIDRS
  - Eagle Sentry Series
  - Silent Sentry
  - Project SPIRIT
  - PIEDMONT
- **BROADBANDPLAN***
- **LIGHTSQUARED***

SHARED

CJCSI/M
MCEB Panel
Spectrum
PPBE OPLAN
CONPLAN
Comm Plans
Annex K
Electronic Warfare
Operations/ Exercises/ Experiments
GCCs
Spectrum Meetings

J667

- **Policy/Guidance**
  - CJCSI 3320 Series
  - DODI 4650
  - NAOC, E-6B, GEPS, DC2Ns, MR-TCDL
- **Forums:**
  - MCEB Frequency Panel
  - GEMSIS CCB
  - JSIR Conference
  - JEMSCC
- **Programs**
  - GEMSIS
  - CJSMPT
  - SPECTRUM XXIO
- **Bold Quest/ Empire Challenge**
- **BROADBANDPLAN* LIGHTSQUARED***

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JS/J6 Task Transition

- **References:**
  - Resource Management Decision 700A3, TF-J6-001
  - Joint Staff & USSTRATCOM MOU, Transfer of Functions and Associated Resources
- **USSTRATCOM assumed the following tasks:**
  - Chair the Joint SATCOM Panel
  - Provide VIP SATCOM Travel Support
  - Advocate for Special users and non-DoD users
  - Support electro-magnetic interference resolution
    - Support resolution of EMI in conjunction with Department of Sate and Host Nations
  - Submit updates to CJCS SATCOM Issuances
  - Draft update to CJCSI 3320.02D-1
  - Formulate SATCOM resource actions for Joint Staff
  - Authorize SATCOM terminal deployment

Roles & Responsibilities

Policy & Procedure Roles

- **Primary Focus Supporting SATCOM Operational Manager (SOM) (CDRUSSTRATCOM)**
- **Direct engineering analyses and other performance-related studies**
- **Develop and implement processes for detection and identification of international SATCOM EMI and jamming.**
- **Develop EMI/jamming resolution COAs in conjunction with JS and JSC. Publishes procedures (SI 714-5) for resolution of non-jamming interference on MILSAT and COMMSAT.**
- **Support DoD Interoperability Communications Event (DICE), Joint User Interoperability Communications Event (JUICE).**
- **Manage apportioned frequencies supporting exercises Bold Quest and Global Thunder as well as various**

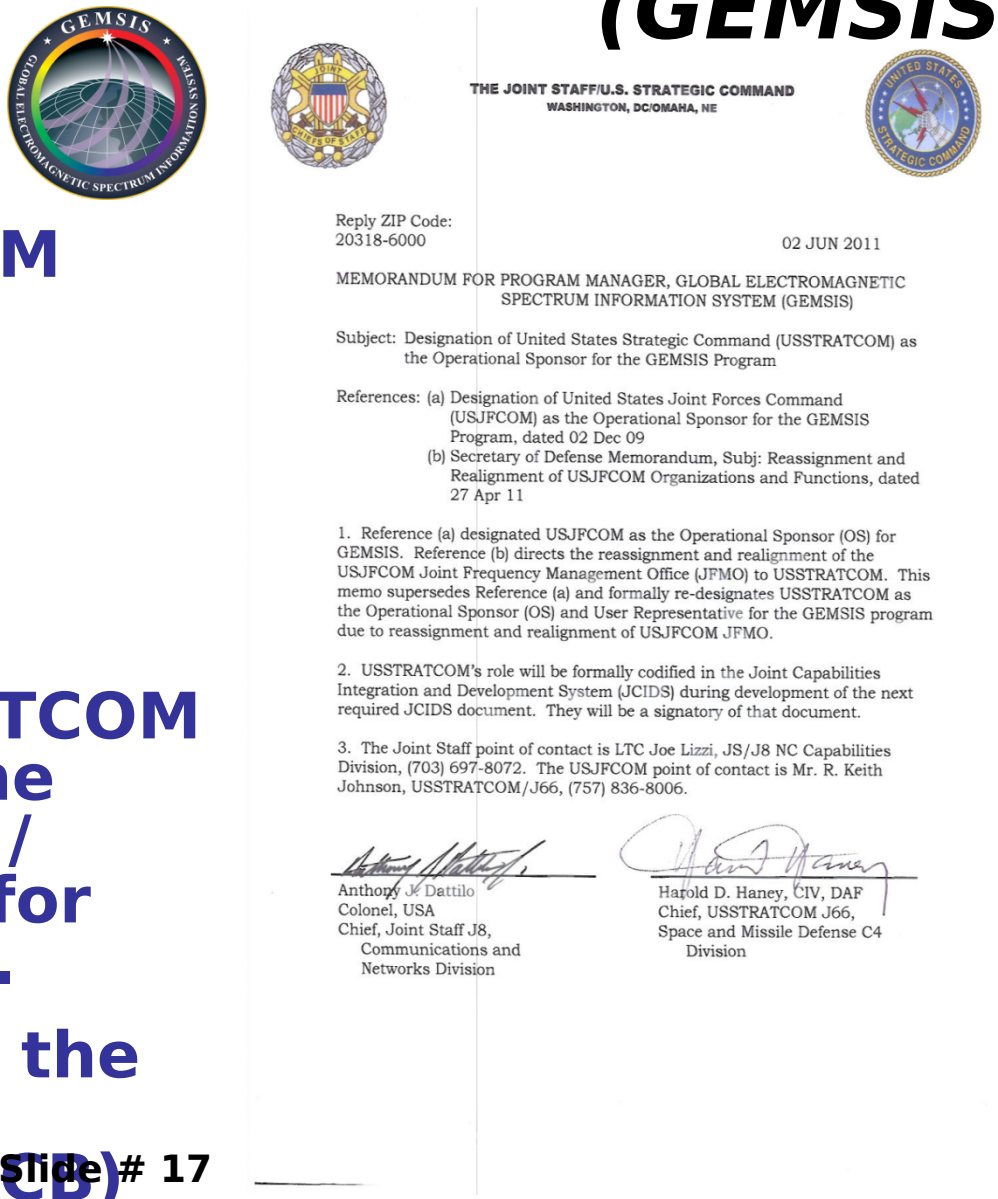
Program & Execution Roles

- **Global SATCOM Electromagnetic Interference/Attack Assessments**
  - Current systems: UFO, DSCS/WGS, Milstar, Commercial
  - Future systems: AEHF, MUOS, IPS
  - Spectrum advisor to Purposeful Interference Resolution Team (PIRT), chaired by STRATCOM J31, mil/commercial joint effort on EMI resolution
- **SATCOM Geo-Location and Remediation Efforts**
  - Eagle Sentry, SPIRIT, RAIDRS, and "others"
- **Support COCOM Mobile Training Team deployments with subject matter experts to various theaters as needed.**
- **Provide support at the DoD TF UAS Frequency & Bandwidth IPT chaired by DoD CIO.**
- **Operational Sponsor and User Representative for the Global Electromagnetic Spectrum Information System (GEMSIS).**
- **Orchestrate Multi-Role Tactical Common Data Link (MR-TCDL) and High Altitude Electromagnetic Pulse (HEMP) testing and assignments**

Milestones
Since Last Conference

Global Electromagnetic Spectrum Information System (GEMSIS)

- 02 Dec 2009 USJFCOM was designated as the Operational Sponsor and Use representative for the GEMSIS program.
- 01 Jun 2011 USSTRATCOM was designated as the Operational Sponsor / User representative for the GEMSIS program.
- 17 Nov 2011 briefed the C4/Cyber Functional Capabilities Board (FCB)



THE JOINT STAFF/U.S. STRATEGIC COMMAND
WASHINGTON, DC/OMAHA, NE

Reply ZIP Code:
20318-6000

02 JUN 2011

MEMORANDUM FOR PROGRAM MANAGER, GLOBAL ELECTROMAGNETIC SPECTRUM INFORMATION SYSTEM (GEMSIS)

Subject: Designation of United States Strategic Command (USSTRATCOM) as the Operational Sponsor for the GEMSIS Program

References: (a) Designation of United States Joint Forces Command (USJFCOM) as the Operational Sponsor for the GEMSIS Program, dated 02 Dec 09
(b) Secretary of Defense Memorandum, Subj: Reassignment and Realignment of USJFCOM Organizations and Functions, dated 27 Apr 11

1. Reference (a) designated USJFCOM as the Operational Sponsor (OS) for GEMSIS. Reference (b) directs the reassignment and realignment of the USJFCOM Joint Frequency Management Office (JFMO) to USSTRATCOM. This memo supersedes Reference (a) and formally re-designates USSTRATCOM as the Operational Sponsor (OS) and User Representative for the GEMSIS program due to reassignment and realignment of USJFCOM JFMO.

2. USSTRATCOM's role will be formally codified in the Joint Capabilities Integration and Development System (JCIDS) during development of the next required JCIDS document. They will be a signatory of that document.

3. The Joint Staff point of contact is LTC Joe Lizzi, JS/J8 NC Capabilities Division, (703) 697-8072. The USJFCOM point of contact is Mr. R. Keith Johnson, USSTRATCOM/J66, (757) 836-8006.

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Major Events/Efforts in 201

- **Empire Challenge and Bold Quest 11**
  - Successful execution and EA events
  - Performed multiple reverse Mode 5 operations with multi-national partners
- **Interference Resolution:**
  - Engaged with Brazil (GoB) through FCC and DoS to assist in EMI mitigation. Monthly statistics and EMI geolocations provided to GoB to aid in law enforcement activity within their country.
  - USSTRATCOM CAT 1 exercises included Live Fire events to test and further refine our process/procedures (SI 714-5)

Major Events/Efforts in 201

- **Light Squared Activities**
  - USSTRATCOM MEMO sent to OSD/ DoD CIO to ensure operational concerns were addressed.
  - Awaiting final assessment of testing results/report.
- **1755-1850 MHz Spectrum Feasibility Study**
  - Provided OSD/JS COCOM operational impacts.
  - Awaiting consolidated recommendation to validate impacts.

Major Events/Efforts in 2011

- **Rapid Attack Identification, Detection, and Reporting System (RAIDRS)**

  RAIDRS is a Space Situational Awareness (SSA) and Defensive Space Control (DSC) system designed to: Detect, Identify, Characterize, Geolocate, and Report SATCOM EMIC-, X-, Ku-, and UHF bands.

- **On track to meet IOC (Sep 12) and FOC (Sep 13)**

  Hawaii - Cement poured, Shelter in place, equipment on site

  Cape Canaveral - Cement pads and ring-walls poured

  Misawa - Site design complete, site prep begins Nov 11

  Kapaun - Site design kickoff Nov 11 (in-progress)

  CENTCOM - Basing Decision Memorandum awaiting Gen Shelton's approval.

ve don't have spectrum, we cant fig

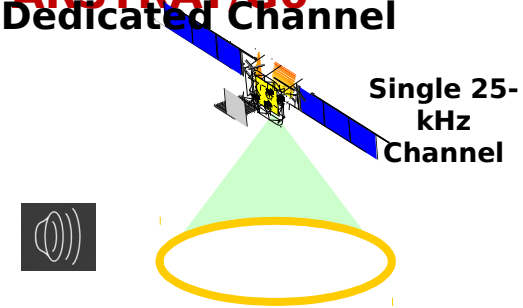
IW Implementation

DISA/NS CYBERCOM/GSSC NNWC ARSTRAT/G6

Integrated Waveform Implementation

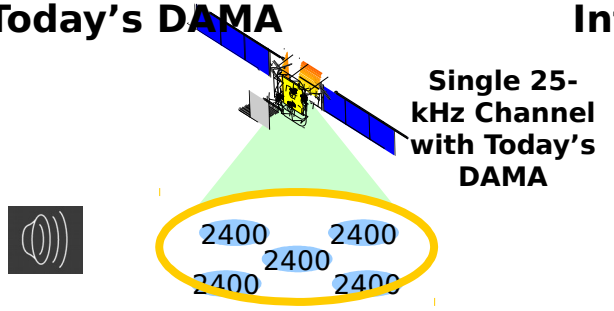
- **Achieved Initial Operational Capability (IOC) as of 20 May 2011**
- **Force multiplier needed for our UHF community**

Dedicated Channel



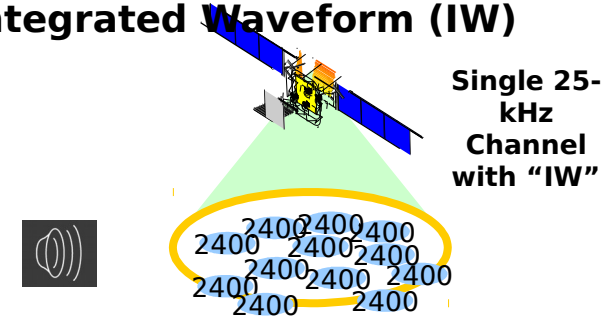
A 25kHz channel typically supports one non-DAMA network

Today's DAMA



A 25-kHz DAMA Channel supports up to 5 simultaneous 2.4k Voice networks

Integrated Waveform (IW)



A 25-kHz IW Channel supports average of 12 simultaneous 2.4k Voice networks

DAMA – Demand-Assigned, Multiple Access
MELP – Mixed Excitation Linear Prediction
IW – Integrated Waveform

International Agreements

- **US-AUS MOU**

  - Communication Arrangements (CAs) are established for SHF/UHF/GEO

  - Implementation Arrangements (IAs) for anchoring at Landstuhl and Wahiawa

- **OSD-UK MOU**

  - OSD-UK CA developed, titled “Defense Communications MOU

  - Current USSTRATCOM/UK SATCOM MOU converted to a CA

  - Signed IAs for SHF/UHF/Geo-location

- **US-Italy MOU**

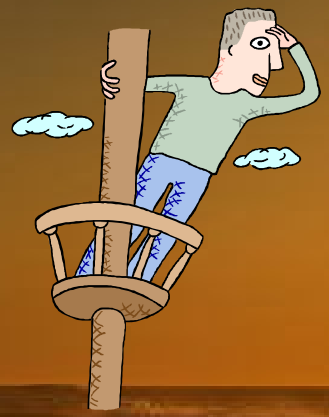
  - Signed CAs for SHF & UHF

  - Exchanging UHF channels for NATO support

- **Spain Draft MOU**

  - In final stages for staffing package to CJCS for authority to approve

  - Will develop a SHF CA after approval



Policy updates

Increased IP Operations

Space Planning OPORD

AEHF-1

WGS-4

MUOS

JIST

What's Over the Horizon?

Note

- The first AEHF spacecraft has arrived at its orbital slot and testing has begun to examine parameters for officially placing it into the protected ring.
- There are new relationships to consider in our operational management of this constellation. Requires shift in thinking on how we make changes, planning, management, and operations

International Partner Operations

Note

- The new WGS Multilateral MOU between the US, Canada, Denmark, Luxembourg, Netherlands and New Zealand, is expected to be signed in December 2011 .
- All except New Zealand “could” be operating on WGS by the end of the month.

Lets agree to operate together

Policy Updates

Note

- Our current policy documents need to be updated. The language still address our MILSATCOM environments of the past.
- Expect updates to both SATCOM and Spectrum management as we continue to evolve into a broader, globally managed and partner based environments.

Mobile User Objective System (MUOS)

Note

- MUOS expects to provide an unprecedented increase in UHF SATCOM capacity and new networking capability
- Requires shift in thinking on how we view UHF SATCOM, planning, management, and operations…host nation approvals
- Scheduled launch is February 2012

JIST Deployment

Joint Integrated SATCOM Tool

COCOMs
CYBERCOM/GSSC
ARSTRAT/RSSCs

Jan - Mar 2012
Dependent upon Ops Eval

Apr- Jun 2012

Jul - Sep 2012

Feb 2011- Dec 2011

- **Issue Implementation plan and memo**
- **Ops Eval - GSSC & TRANSCOM**
- **IOC ~ Jan 2012 @ completion of all GSSC users**

Questions?